UNITED STATES PATENT AND TRADEMARK OFFICE

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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 April 2008*.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-9,11-17 and 19-30* is/are pending in the application.
     4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1, 3-9, 11-17, and 19-30* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
     a)☐ All   b)☐ Some * c)☐ None of:
         1.☐ Certified copies of the priority documents have been received.
         2.☐ Certified copies of the priority documents have been received in Application No. _____.
         3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
     Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114. Applicant's submission filed on 4/25/2008 has been entered.

Response to Amendment

1.   This action is responsive to an Amendment filed 4/25/2008. Claims **1**, **3-9**, **11-17**, and

19-30 are pending. Claims **1**, **5**, **9**, **12**, **13**, and **17** are amended. Claims **2**, **10**, and **18** are

canceled. Claims **29**, **30** are new.

Response to Arguments

1.   Applicant's arguments regarding claims **1**, **9**, and **17**, filed 4/25/2008, have been fully

considered, but they are not persuasive.

        Regarding claims **1**, **9**, and **17**, the applicant argues that Davis et al. does not disclose

determining a less descriptive word from at least two meaningful words, wherein each of the at

least two meaningful words appears at least once in the database. The examiner respectfully

disagrees. As noted in the Office Action mailed 11/27/2007, Davis et al. discloses an interactive

computer program used to edit program listings data (col. 17, l. 44-46). A data processor

determines how much space is required to display a title based on its character length (col. 18, l.

1-3). If the data processor determines that a full title requires too much space to fit into one or

more grid cells and if the title has not been previously edited, the title is presented to an editor

using a display device connected to the data processor. The editor is then queried to alter the

title, so that it will fit in the allotted space (col. 18, l. 12-21). Figure 11a clearly illustrates that

the editor found the words "BEST," "SHOW," and "TODAY," as being meaningful for display,

but in reduced 60 and 30 minute grid slots found the words "BEST" and "SHOW" as being more

meaningful than the word "TODAY." The edits are then stored in a library of shortened titles

(col. 18, l. 35-43; col. 19, l. 38-43; & Figs. 10A, 11a, 11b). Davis et al. further discloses that the

next time the program title needs to be shortened the data processor will edit it automatically

based on the shortened title in the database (col. 18, l. 35-45).

Davis et al. still further discloses that, based on the duration of the program, data

processor 15 determines what grid size listings are needed for each title. Thus, a two hour movie

could require four different edited titles to fit into each of the four different size grid cells (30,

60, 90, 120 minutes)(col. 17, l. 63-67 & col. 18, l. 1). These shortened titles would then be

added to the library (col. 18, l. 39-43). Figure 11a illustrates edited titles for 30, 60, and 90

minute grid cells (Fig. 11a). In this case, both the words "SHOW," and "TODAY" are included

in the 90 minute grid cell, but the word "TODAY" is removed in the 60 minute grid cell. The

examiner interprets this as "each of the at least two meaningful words appears at least once in a

database." When the data processor needs to edit the same title again, it will automatically

retrieve "THE BEST SHOW" for the 60 minute slot. The examiner notes that the word

"SHOW" appears more frequently within the 60 minute grid cell of the database than the word

"TODAY," because it appears once. This meets the limitation of "determining a less descriptive word from the at least two meaningful words based on a frequency with which each of the at least two meaningful words appear in a database," as currently claimed.

Claim Rejections - 35 USC § 112

1.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2.   Claims **29, 30** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Referring to claims **29** and **30**, the examiner fails to find support for the newly claimed subject matter in the specification. Claim **29** recites that the first word appears in the database with a greater frequency than the second word and wherein determining a less descriptive word from the at least two meaningful words includes determining that the second word is the less descriptive word; however, Applicant's specification states that the words that appear most often in the database are typically the least descriptive of a particular program title. Applicant's specification goes on to state that, "[t]herefore, the frequency of two meaningful words in a program title may be compared and the one that occurs less frequently in the overall database retained" (Applicant's specification, paragraph 25). Claim **30** recites that the second word is

determined to be the less descriptive word in response to determining that the first word appears

in the database with a greater frequency than the second word. As stated before, this appears to

be opposite to that described by Applicant's specification.

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on
> sale in this country, more than one year prior to the date of application for patent in the United States.

2.   Claims **1**, **9**, **17**, **21-23**, **25**, and **28** are rejected under 35 U.S.C. 102(b) as being

anticipated by Davis et al.

Referring to claims **1** and **9**, Davis et al. discloses a machine-readable medium/method

comprising:

- determining at least two meaningful words in a program title of an electronic program

    guide, wherein each of the at least two meaningful words appears at least once in a

    database (if a title has not been previously edited and the title is too long for its grid

    size, an editor edits the title to fit the grid. Figure 11a clearly illustrates that the editor

    found the words "BEST," "SHOW," and "TODAY," as being meaningful for display,

    but in reduced 60 and 30 minute grid slots found the words "BEST" and "SHOW" as

    being more meaningful than the word "TODAY." The edits are then stored in a

    library of shortened titles)(col. 18, l. 12-21, 35-43; col. 19, l. 38-43; & Figs. 10A, 11a,

    11b);

- determining a less descriptive word from the at least two meaningful words based on a frequency with which each of the at least two meaningful words appear in the database (the next time the program title needs to be edited, the data processor will edit it automatically based on the shortened title in the database. A word that appears in the shortened title has a greater frequency than one that does not, and will thus be used in the edited version)(col. 18, l. 35-45);

- selectively removing the less descriptive word from the program title to create an abbreviated program title (col. 18, l. 35-45); and

- displaying the abbreviated program title in a program title field of the electronic program guide (Figs. 5a-5c, 7a-7c, & 11a).

Referring to claim **17**, Davis et al. discloses an apparatus comprising:

- a memory 115 (col. 17, l. 49-50 & Fig. 1);

- a processor configured to, upon execution of one or more computer readable instructions stored in the memory, perform a method comprising:

  (a) determining at least two meaningful words in a program title (if a title has not been previously edited and the title is too long for its grid size, an editor edits the title to fit the grid. Figure 11a clearly illustrates that the editor found the words "BEST," "SHOW," and "TODAY," as being meaningful for display, but in reduced 60 and 30 minute grid slots found the words "BEST" and "SHOW" as being more meaningful than the word "TODAY")(col. 18, l. 12-21; col. 19, l. 38-43; & Figs. 10A, 11a, 11b);

(b) determining a less descriptive word from the at least two meaningful words

based on a frequency that each of the two meaningful words appear in a

database (the next time the program title needs to be edited, the data processor

will edit it automatically based on the shortened title in the database. A word

that appears in the shortened title has a greater frequency than one that does

not, and will thus be used in the edited version)(col. 18, l. 35-45); and

(c) selectively removing the less descriptive word from the program title to create

an abbreviated program title (col. 18, l. 35-45); and

- a display device configured to display the abbreviated program title in a program title

field of an onscreen program guide (Figs. 5a-5c, 7a-7c, & 11a).

Referring to claims **21-23**, Davis et al. discloses the method/machine-readable

medium/apparatus of claims 1, 9, and 17, respectively, wherein in addition to removing the less

descriptive word, the method further includes:

- parsing the text of the program title (col. 17, l. 48-50, 60-67; col. 18, l. 1-3, 13-21; &

Figs. 10A, 11a);

- determining at least one nonessential, nonrelational word of the program title (col. 18,

l. 12-21; col. 19, l. 38-43; & Figs. 10A, 11a); and

- removing the nonessential, nonrelational word from the program title (Figs. 10A &

11a).

Referring to claim **25**, Davis et al. discloses the apparatus of claim 17, wherein the

apparatus is a head end (Fig. 1).

Referring to claim **28**, Davis et al. discloses the method of claim 1, wherein the database

includes a database of program titles (col. 18, l. 35-43).

Referring to claim **29**, Davis et al. discloses the method of claim 1, wherein the at least

two meaningful words include a first word and a second word, wherein the first word appears in

the database with a greater frequency than the second word and wherein determining a less

descriptive word from the at least two meaningful words includes determining that the second

word is the less descriptive word (col. 18, l. 35-43 & Figs. 10a, 11a).

Referring to claim **30**, Davis et al. discloses the method of claim 29, wherein the second

word is determined to be the less descriptive word in response to determining that the first word

appears in the database with a greater frequency than the second word (col. 18, l. 35-43 & Figs.

10a, 11a).

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

4.   Claims **3-5**, **8**, **11-13**, **16**, **19-20** are rejected under 35 U.S.C. 103(a) as being unpatentable

over Davis et al. in view of Kudrolli et al.

Referring to claims **3**, **11**, and **19**, Davis et al. discloses the methods/apparatus of claims

1, 9, and 17, respectively. Davis et al. does not disclose:

-       determining at least one relational word of the program title; and

- replacing the at least one relational word with a representative character.

Kudrolli et al. discloses replacing the word "and" with the character "&" in order to cope with display space constraints in computer software (Fig. 20). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify Davis et al. to include replacing the word "and" with the character "&," such as that taught by Kudrolli et al. in order to make program guides more useful for a viewer and more pleasant to watch (Davis et al. col. 2, l. 38-41).

Referring to claims **4, 12,** and **20,** the combination of Davis et al. and Kudrolli et al. teaches:

- determining at least one essential word of a program title;

- determining the number of characters necessary to display the at least one essential word; and

- abbreviating the at least one essential word if the number of characters necessary to display the at least one essential word is greater than the specified number of characters (Kudrolli et al. col. 7, l. 48-55).

Referring to claims **5** and **13,** the combination of Davis et al. and Kudrolli et al. teaches:

- determining a plurality of essential words of the program title;

- determining the number of characters necessary to display the plurality of essential words; and

- removing an essential word if the number of characters necessary to display the plurality of essential words is greater than the specified number of characters (the

examiner notes that the title word will be deleted only if the prior four steps are

exhausted (Kudrolli et al. col. 7, l. 61).

Referring to claims **8** and **16**, the combination of Davis et al. and Kudrolli et al. teaches

that an essential word occurring most frequently in a database is removed (Kudrolli et al. col. 7,

l. 40-47).

5.   Claims **6**, **14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis et al.

in view of Knauft et al.

Referring to claims **6** and **14**, Davis et al. discloses the method/machine-readable medium

of claims 21 and 22, respectively. Davis et al. does not disclose that the at least one nonessential,

nonrelational word comprises all of the words selected from the group consisting of adverbs,

adjectives, prepositions, and articles. Knauft et al. discloses an electronic document retrieval

system that removes adjectives or adverbs from the document prior to presenting the document

to an information retrieval (IR) engine. It would have been obvious to one of ordinary skill in

the art at the time that the invention was made to modify Davis et al. to include removing

adjectives or adverbs from an electronic document prior to its presentation such as that taught by

Knauft et al. in order to provide information to a system that is almost as usable as the original

(col. 2, l. 31-33).

NOTE: The USPTO considers the applicant's "selected from the group consisting of" language

to be anticipated by any reference containing any of the subsequent corresponding elements.

6.   Claims **7**, **15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis et al.

in view of Kudrolli et al. and further in view of Hejna, Jr.

        Referring to claims **7** and **15**, the combination of Davis et al. and Kudrolli et al. teaches

the methods of claims 4 and 12, respectively. The combination of Davis et al. and Kudrolli et al.

does not teach that the at least one essential word comprises all of the words selected from the

group consisting of subject, object nouns, and verbs. Hejna, Jr. discloses removing articles and

adjectives from conceptual information contained within TV broadcasts to provide output

comprised only of nouns and noun phrases (col. 14, l. 16-19 & col. 16, l. 46-51). It would have

been obvious to one of ordinary skill in the art at the time that the invention was made to modify

the combination of Davis et al. and Kudrolli et al. to include providing output comprised only of

nouns and noun phrases such as that taught by Hejna, Jr. in order to make a program guide more

useful to a viewer and more pleasant to watch (Davis et al. col. 2, l. 38-41).

NOTE: The USPTO considers the applicant's "selected from the group consisting of" language

to be anticipated by any reference containing any of the subsequent corresponding elements.

7.   Claims **24**, **26**, and **27** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Davis et al. in view of Wehmeyer.

        Referring to claim **24**, Davis et al. discloses the apparatus of claim 17. Davis et al.

further discloses that the program listings data are edited through the use of a processor

executing a text fit interactive computer program (col. 17, l. 44-46). Davis et al. also discloses

that program listings can be listed in an interactive program guide implemented on a cable

converter box, the converter box containing processor and memory capabilities (col. 20, l. 1-4).

The program schedule information is downloaded and stored in the converter box memory and can be controlled locally (col. 20, l. 18-21, 24-26). Davis et al. does not disclose that the text fit system is implemented on a set-top box. Wehmeyer discloses an interface for locally customizing program guide information containing program descriptions (see Abstract) in a cable converter box (col. 10, l. 51-62). Generic program guide information, including program identifiers, is received and stored in the cable converter box (col. 11, l. 11-22). The user may edit text in a cell of the electronic program guide (EPG) by highlighting a cell, selecting an edit text mode key, and entering the desired text. For example, the user may change the text "THE GOLDEN ERA" to "THE ERA" (col. 16, l. 50-64 & Fig. 8). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the text fit system of Davis et al. to be implemented on the cable converter box, rather than the head end, such as that taught by Wehmeyer in order to provide users with ways to customize the program guide list (Wehmeyer col. 2, l. 13-15).

Referring to claims **26** and **27**, the combination of Davis et al. and Wehmeyer teaches the apparatus of claim 24, wherein a satellite transmits a signal to a satellite dish connected to the set-top box (col. 5, l. 26-28), which is connected to a television, and wherein the television is the display device (col. 21, l. 4-8 & Fig. 12).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL VAN HANDEL whose telephone number is (571)272-5968. The examiner can normally be reached on 8:00am-5:30pm Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Chris Kelley can be reached on 571-272-7331. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Annan Q Shang/
Primary Examiner, Art Unit 2623

MVH